

INFINITY PHARMACEUTICALS, INC.

Form SC 13D

April 12, 2018

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D

(Rule 13d-101)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT

TO § 240.13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT TO

§ 240.13d-2(a)

(Amendment No.)¹

Infinity Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, \$0.001 par value

(Title of Class of Securities)

45665G303

(CUSIP Number)

JAMES KRATKY

BVF Partners L.P.

1 Sansome Street, 30th Floor

San Francisco, California 94104

(415) 525-8890

ADAM W. FINERMAN, ESQ.

OLSHAN FROME WOLOSKY LLP

1325 Avenue of the Americas

New York, New York 10019

(212) 451-2300

(Name, Address and Telephone Number of Person

Authorized to Receive Notices and Communications)

April 10, 2018

(Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box .

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 240.13d-7 for other parties to whom copies are to be sent.

1 The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the *Notes*).

CUSIP No. 45665G303

1 NAME OF REPORTING PERSON

BIOTECHNOLOGY VALUE
FUND, L.P.

2 CHECK THE
APPROPRIATE BOX IF (a)
A MEMBER OF A
GROUP (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS

WC
CHECK BOX IF
DISCLOSURE OF
LEGAL
5 PROCEEDINGS IS
REQUIRED
PURSUANT TO ITEM
2(d) OR 2(e)

6 CITIZENSHIP OR PLACE OF
ORGANIZATION

DELAWARE

NUMBER OF	7	SOLE VOTING POWER
SHARES BENEFICIALLY		- 0 -
OWNED BY	8	SHARED VOTING POWER
EACH REPORTING		5,285,341
PERSON WITH	9	SOLE DISPOSITIVE POWER
		- 0 -
	10	SHARED DISPOSITIVE POWER
		5,285,341

11

AGGREGATE AMOUNT
BENEFICIALLY OWNED BY
EACH REPORTING PERSON

5,285,341

12 CHECK BOX IF THE
AGGREGATE
AMOUNT IN ROW (11)
EXCLUDES CERTAIN
SHARES

13 PERCENT OF CLASS
REPRESENTED BY AMOUNT IN
ROW (11)

14 10.2%
TYPE OF REPORTING PERSON

PN

CUSIP No. 45665G303

1 NAME OF REPORTING PERSON

BIOTECHNOLOGY VALUE
FUND II, L.P.

2 CHECK THE
APPROPRIATE BOX IF (a)
A MEMBER OF A
GROUP (b)

3 SEC USE ONLY

4 SOURCE OF FUNDS

WC
CHECK BOX IF
DISCLOSURE OF
LEGAL
5 PROCEEDINGS IS
REQUIRED
PURSUANT TO ITEM
2(d) OR 2(e)

6 CITIZENSHIP OR PLACE OF
ORGANIZATION

DELAWARE

NUMBER OF	7	SOLE VOTING POWER
SHARES BENEFICIALLY		- 0 -
OWNED BY	8	SHARED VOTING POWER
EACH REPORTING		3,543,041
PERSON WITH	9	SOLE DISPOSITIVE POWER
		- 0 -
	10	SHARED DISPOSITIVE POWER
		3,543,041

11

AGGREGATE AMOUNT
BENEFICIALLY OWNED BY
EACH REPORTING PERSON

3,543,041

12 CHECK BOX IF THE
AGGREGATE
AMOUNT IN ROW (11)
EXCLUDES CERTAIN
SHARES

13 PERCENT OF CLASS
REPRESENTED BY AMOUNT IN
ROW (11)

14 6.8%
TYPE OF REPORTING PERSON

PN

CUSIP No. 45665G303

1 NAME OF REPORTING PERSON

BIOTECHNOLOGY VALUE TRADING FUND OS LP

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS

WC
CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

CAYMAN ISLANDS

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

7 SOLE VOTING POWER

- 0 -

OWNED BY EACH REPORTING PERSON WITH

8 SHARED VOTING POWER
950,473

SOLE DISPOSITIVE POWER

- 0 -

10 SHARED DISPOSITIVE POWER

950,473

11 AGGREGATE AMOUNT
BENEFICIALLY OWNED BY
EACH REPORTING PERSON

950,473

12 CHECK BOX IF THE
AGGREGATE
AMOUNT IN ROW (11)
EXCLUDES CERTAIN
SHARES

13 PERCENT OF CLASS
REPRESENTED BY AMOUNT
IN ROW (11)

1.8%

14 TYPE OF REPORTING
PERSON

PN

CUSIP No. 45665G303

1 NAME OF REPORTING PERSON

BVF PARTNERS OS LTD.

2 CHECK THE APPROPRIATE BOX IF A MEMBER (a) OF A GROUP

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS

AF

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

CAYMAN ISLANDS

NUMBER OF 7 SOLE VOTING POWER

SHARES BENEFICIALLY - 0 -

OWNED BY 8 SHARED VOTING POWER

EACH REPORTING 950,473

PERSON WITH 9 SOLE DISPOSITIVE POWER

- 0 -

10 SHARED DISPOSITIVE POWER

950,473

11

AGGREGATE AMOUNT
BENEFICIALLY OWNED
BY EACH REPORTING
PERSON

950,473

12

CHECK BOX IF
THE AGGREGATE
AMOUNT IN ROW
(11) EXCLUDES
CERTAIN SHARES

13

PERCENT OF CLASS
REPRESENTED BY
AMOUNT IN ROW (11)

1.8%

14

TYPE OF REPORTING
PERSON

CO

5

CUSIP No. 45665G303

1	NAME OF REPORTING PERSON
	BVF PARTNERS L.P.
2	CHECK THE APPROPRIATE BOX IF A MEMBER (a) OF A GROUP (b)
3	SEC USE ONLY
4	SOURCE OF FUNDS
	AF
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)
6	CITIZENSHIP OR PLACE OF ORGANIZATION
	DELAWARE
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7 SOLE VOTING POWER
	- 0 -
8	SHARED VOTING POWER
	11,276,508
9	SOLE DISPOSITIVE POWER
	- 0 -
10	SHARED DISPOSITIVE POWER
	11,276,508

11 AGGREGATE AMOUNT
BENEFICIALLY OWNED BY
EACH REPORTING PERSON

11,276,508

12 CHECK BOX IF
THE AGGREGATE
AMOUNT IN ROW
(11) EXCLUDES
CERTAIN SHARES

13 PERCENT OF CLASS
REPRESENTED BY AMOUNT
IN ROW (11)

21.7%

14 TYPE OF REPORTING
PERSON

PN, IA

CUSIP No. 45665G303

1	NAME OF REPORTING PERSON
	BVF INC.
2	CHECK THE APPROPRIATE BOX IF A MEMBER (a) OF A GROUP (b)
3	SEC USE ONLY
4	SOURCE OF FUNDS
	AF
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)
6	CITIZENSHIP OR PLACE OF ORGANIZATION
	DELAWARE
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7 SOLE VOTING POWER
	- 0 -
8	SHARED VOTING POWER
	11,276,508
9	SOLE DISPOSITIVE POWER
	- 0 -
10	SHARED DISPOSITIVE POWER
	11,276,508

11 AGGREGATE AMOUNT
BENEFICIALLY OWNED BY
EACH REPORTING PERSON

11,276,508

12 CHECK BOX IF
THE AGGREGATE
AMOUNT IN ROW
(11) EXCLUDES
CERTAIN SHARES

13 PERCENT OF CLASS
REPRESENTED BY AMOUNT
IN ROW (11)

21.7%

14 TYPE OF REPORTING
PERSON

CO

CUSIP No. 45665G303

1 NAME OF REPORTING PERSON

MARK N. LAMPERT

2 CHECK THE APPROPRIATE BOX IF A MEMBER (a) OF A GROUP

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS

AF
CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

USA

NUMBER OF	7	SOLE VOTING POWER
SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH		- 0 -
	8	SHARED VOTING POWER
		11,276,508
	9	SOLE DISPOSITIVE POWER
		- 0 -
	10	SHARED DISPOSITIVE POWER
		11,276,508

11 AGGREGATE AMOUNT
BENEFICIALLY OWNED BY
EACH REPORTING PERSON

11,276,508

12 CHECK BOX IF
THE AGGREGATE
AMOUNT IN ROW
(11) EXCLUDES
CERTAIN SHARES

13 PERCENT OF CLASS
REPRESENTED BY AMOUNT
IN ROW (11)

21.7%

14 TYPE OF REPORTING
PERSON

IN

CUSIP No. 45665G303

The following constitutes the Schedule 13D filed by the undersigned (the “Schedule 13D”). The Reporting Persons initially filed a Schedule 13G with respect to the securities of the Issuer (defined below) pursuant to Rule 13d-1(c) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) on June 24, 2016, and filed amendments thereto. As of April 10, 2018, certain of the Reporting Persons may be deemed to beneficially own in excess of twenty percent of the outstanding Shares (defined below) of the Issuer. Accordingly, the Reporting Persons are no longer eligible to report their beneficial ownership with respect to the securities of the Issuer on Schedule 13G, and in accordance with Rule 13d-1(f) of the Exchange Act, the Reporting Persons are transitioning to a Schedule 13D.

Item 1.

Security and Issuer.

This statement relates to shares of the Common Stock, \$0.001 par value (the “Shares”), of Infinity Pharmaceuticals, Inc., a Delaware corporation (the “Issuer”). The address of the principal executive offices of the Issuer is 784 Memorial Drive, Cambridge, Massachusetts 02139.

Item 2.

Identity and Background.

(a) This statement is filed by:

- (i) Biotechnology Value Fund, L.P., a Delaware limited partnership (“BVF”);
- (ii) Biotechnology Value Fund II, L.P., a Delaware limited partnership (“BVF2”);
- (iii) Biotechnology Value Trading Fund OS, L.P., a Cayman Islands limited partnership (“Trading Fund OS”);
- (iv) BVF Partners OS Ltd., a Cayman Islands limited liability company (“Partners OS”), which serves as general partner of Trading Fund OS;
- (v) BVF Partners L.P., a Delaware limited partnership (“Partners”), which serves as the general partner of each of BVF and BVF2, the investment manager of Trading Fund OS, the sole member of Partners OS, and the investment manager of certain managed accounts (the “Partners Managed Accounts”);
- (vi) BVF Inc., a Delaware corporation, which serves as the general partner of Partners; and
- (vii) Mark N. Lampert, who serves as the sole officer and director of BVF Inc.

Each of the foregoing is referred to as a “Reporting Person” and collectively as the “Reporting Persons.” Each of the Reporting Persons is party to that certain Joint Filing Agreement, as further described in Item 6. Accordingly, the Reporting Persons are hereby filing a joint Schedule 13D.

(b) The business address of BVF, BVF2, Partners, BVF Inc. and Mr. Lampert is 1 Sansome Street, 30th Floor, San Francisco, California. The business address of Trading Fund OS and Partners OS is PO Box 309 Umland House, Grand Cayman, KY1-1104, Cayman Islands.

(c) The principal business of each of BVF, BVF2, and Trading Fund OS is investing in securities. The principal business of Partners OS is serving as the general partner of Trading Fund OS. The principal business of Partners is serving as the general partner of each of BVF and BVF2, the investment manager of Trading Fund OS, the sole member of Partners OS, and the investment manager of the Partners Managed Accounts. The principal business of BVF Inc. is serving as the general partner of Partners. The principal business of Mr. Lampert is serving as the sole officer and director of BVF Inc.

CUSIP No. 45665G303

- (d) No Reporting Person has, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) No Reporting Person has, during the last five years, been party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
- (f) Mr. Lampert is a citizen of the United States of America.

Item 3. Source and Amount of Funds or Other Consideration.

The Shares purchased by BVF, BVF2 and Trading Fund OS were purchased with working capital (which may, at any given time, include margin loans made by brokerage firms in the ordinary course of business) in open market purchases, except as otherwise noted. The aggregate purchase price of the 5,285,341 Shares beneficially owned by BVF is approximately \$7,588,219, including brokerage commissions. The aggregate purchase price of the 3,543,041 Shares beneficially owned by BVF2 is approximately \$5,117,990, including brokerage commissions. The aggregate purchase price of the 950,473 Shares beneficially owned by Trading Fund OS is approximately \$1,384,553, including brokerage commissions. The aggregate purchase price of the 1,497,653 Shares held in the Partners Managed Accounts is approximately \$2,019,197, including brokerage commissions.

Item 4. Purpose of Transaction.

The Reporting Persons purchased the Shares based on the Reporting Persons' belief that the Shares, when purchased, were undervalued and represented an attractive investment opportunity. Depending upon overall market conditions, other investment opportunities available to the Reporting Persons, and the availability of Shares at prices that would make the purchase or sale of Shares desirable, the Reporting Persons may endeavor to increase or decrease their position in the Issuer through, among other things, the purchase or sale of Shares on the open market or in private transactions or otherwise, on such terms and at such times as the Reporting Persons may deem advisable.

No Reporting Person has any present plan or proposal which would relate to or result in any of the matters set forth in subparagraphs (a) - (j) of Item 4 of Schedule 13D except as set forth herein or such as would occur upon or in connection with completion of, or following, any of the actions discussed herein. The Reporting Persons intend to review their investment in the Issuer on a continuing basis. Depending on various factors including, without limitation, the Issuer's financial position and investment strategy, the price levels of the Shares, conditions in the securities markets and general economic and industry conditions, the Reporting Persons may in the future take such actions with respect to their investment in the Issuer as they deem appropriate including, without limitation, engaging in communications with management and the Board of the Issuer, engaging in discussions with stockholders of the Issuer and others about the Issuer and the Reporting Persons' investment, making proposals to the Issuer concerning changes to the capitalization, ownership structure, board structure (including board composition) or operations of the Issuer, purchasing additional Shares, selling some or all of their Shares, engaging in short selling of or any hedging or similar transaction with respect to the Shares, or changing their intention with respect to any and all matters referred to in Item 4.

CUSIP No. 45665G303

Item 5. Interest in Securities of the Issuer.

(a) The aggregate percentage of Shares reported owned by each person named herein is based on 51,961,800 shares of Common Stock outstanding as of March 1, 2018, as disclosed in the Issuer's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 15, 2018.

As of the close of business on April 12, 2018, (i) BVF beneficially owned 5,285,341 Shares, representing percentage ownership of approximately 10.2% of the Shares outstanding, (ii) BVF2 beneficially owned 3,543,041 Shares, representing percentage ownership of approximately 6.8% of the Shares outstanding, (iii) Trading Fund OS beneficially owned 950,473 Shares, representing percentage ownership of approximately 1.8% of the Shares outstanding and (iv) 1,497,653 Shares were held in the Partners Managed Accounts, representing percentage ownership of approximately 2.9% of the Shares outstanding.

Partners OS as the general partner of Trading Fund OS, may be deemed to beneficially own the 950,473 Shares beneficially owned by Trading Fund OS, representing percentage ownership of approximately 1.8% of the Shares outstanding.

Partners, as the general partner of BVF and BVF2, the sole member of Partners OS, and the investment manager of Trading Fund OS and the Partners Managed Accounts, may be deemed to beneficially own the 11,276,508 Shares beneficially owned in the aggregate by BVF, BVF2, Trading Fund OS, and the Partners Managed Accounts, representing percentage ownership of approximately 21.7% of the Shares outstanding.

BVF Inc., as the general partner of Partners, may be deemed to beneficially own the 11,276,508 Shares beneficially owned by Partners, representing percentage ownership of approximately 21.7% of the Shares outstanding.

Mr. Lampert, as a director and officer of BVF Inc. may be deemed to beneficially own the 11,276,508 Shares beneficially owned by BVF Inc., representing percentage ownership of approximately 21.7% of the Shares outstanding.

(b) Each of BVF, BVF2, and Trading Fund OS, shares with Partners voting and dispositive power over the Shares each such entity beneficially owns. Trading Fund OS, shares with Partners OS, voting and dispositive power over the Shares beneficially owned by Trading Fund OS. Partners, BVF Inc. and Mr. Lampert share voting and dispositive power over the 11,276,508 Shares they may be deemed to beneficially own with BVF, BVF2, Trading Fund OS, Partners OS and the Partners Managed Accounts.

(c) Schedule A annexed hereto lists all transactions in securities of the Issuer during the past sixty days by the Reporting Persons. All of such transactions were effected in the open market, except as otherwise noted.

(d) No person other than the Reporting Persons is known to have the right to receive, or the power to direct the receipt of dividends from, or proceeds from the sale of, the Shares.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer. On April 12, 2018, the Reporting Persons entered into a Joint Filing Agreement in which the Reporting Persons agreed to the joint filing on behalf of each of them of statements on Schedule 13D, with respect to securities of the Issuer, to the extent required by applicable law. A copy of this agreement is attached hereto as Exhibit 99.1 hereto and is incorporated herein by reference.

CUSIP No. 45665G303

Partners is the general partner of each of BVF and BVF2 pursuant to limited partnership agreements which authorize Partners, among other things, to invest the funds of BVF and BVF2 in the Shares and other securities and to vote, exercise or convert and dispose of such securities. Pursuant to such limited partnership agreements, Partners is entitled to receive fees based on assets under management and allocations based on realized and unrealized gains on such assets.

Partners is the sole member of Partners OS and the investment manager of Trading Fund OS, pursuant to an investment management agreement which authorizes Partners, among other things, to invest the funds of Trading Fund OS in the Shares and other securities and to vote, exercise or convert and dispose of such securities. Pursuant to such investment management agreement, Partners is entitled to receive fees based on assets under management and allocations based on realized and unrealized gains on such assets

Pursuant to investment management agreements with certain of the Partners Managed Accounts, Partners and BVF Inc. have authority, among other things, to invest funds of certain of the Partners Managed Accounts in the Shares and other securities and to vote, exercise or convert and dispose of such securities. Pursuant to such investment management agreements, Partners and BVF Inc. receive fees based on realized and unrealized gains thereon.

Other than as described herein, there are no contracts, arrangements, understandings or relationships among the Reporting Persons, or between the Reporting Persons and any other person, with respect to the securities of the Issuer.

Item 7.

Material to be Filed as Exhibits.

Joint Filing Agreement by and among Biotechnology Value Fund, L.P., Biotechnology Value Fund II, L.P., 99.1 Biotechnology Value Trading Fund OS LP, BVF Partners OS Ltd., BVF Partners L.P., BVF Inc. and Mark N. Lampert, dated April 12, 2018.

CUSIP No. 45665G303

SIGNATURES

After reasonable inquiry and to the best of his knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Dated: April 12, 2018

BIOTECHNOLOGY VALUE FUND, L.P.

By: BVF Partners L.P., its general partner
By: BVF Inc., its general partner

By: /s/ Mark N. Lampert
Mark N. Lampert
President

BVF INC.

By: /s/ Mark N. Lampert
Mark N. Lampert
President

/s/ Mark N. Lampert
MARK N. LAMPERT

BIOTECHNOLOGY VALUE FUND II, L.P.

By: BVF Partners L.P., its general partner
By: BVF Inc., its general partner

By: /s/ Mark N. Lampert
Mark N. Lampert
President

BVF PARTNERS L.P.

By: BVF Inc., its general partner

By: /s/ Mark N. Lampert
Mark N. Lampert
President

BVF PARTNERS OS LTD.

By: BVF Partners L.P., its sole member
By: BVF Inc., its general partner

By: /s/ Mark N. Lampert
Mark N. Lampert
President

Biotechnology Value Trading Fund OS LP

By: BVF Partners L.P., its investment manager
By: BVF Inc., its general partner

By: /s/ Mark N. Lampert
Mark N. Lampert
President

CUSIP No. 45665G303

SCHEDULE A

Transactions in the Securities of the Issuer During the Past Sixty Days

<u>Class of Securities</u>	<u>Price (\$)</u>	<u>Date of</u>
<u>Security Purchased / (Sold)</u>		<u>Purchase / Sale</u>

BIOTECHNOLOGY VALUE FUND, L.P.

Common Stock 228,691 1.9000 04/09/2018

Common Stock 546,865 2.0000 04/10/2018

BIOTECHNOLOGY VALUE FUND II, L.P.

Common Stock 208,872 1.9000 04/09/2018

Common Stock 365,682 2.0000 04/10/2018

BIOTECHNOLOGY VALUE TRADING FUND OS LP

Common Stock 62,437 1.9000 04/09/2018

Common Stock 97,453 2.0000 04/10/2018